



## WILDLAND FIREFIGHTING TERMINOLOGY

### STUDENT INFORMATION SHEET 4202.1-1

- |     |               |                                                                                                                                                                                                                |
|-----|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01. | AIR DROPS     | Fire retarding drops from aircraft.                                                                                                                                                                            |
| 02. | AIR TANKER    | Any fixed wing aircraft certified by FAA as being capable of transport and delivery of fire retardant solutions. (NWCG)                                                                                        |
| 03. | ANCHOR POINT  | An advantageous location, usually a barrier to fire spread from which to start constructing control line. Used to minimize the chance of being flanked by the fire while the line is being constructed. (NWCG) |
| 04. | AREA IGNITION | A large area of fuel is ignited almost all at once (simultaneously) – associated with extreme fire behavior or “BLOWUPS”                                                                                       |
| 05. | ASPECT        | The direction a slope is facing; its exposure in relation to the sun.                                                                                                                                          |
| 06. | ATTACK PHASE  | All suppression work on a fire from initial attack through containment. It is not uncommon for larger fires to have segments of perimeter in each of the three phases of attack, mopup, and patrol.            |
| 07. | BACKFIRE      | A fire suppression tactic. Any intentionally set fire used to consume the fuel in the path of a free burning wild fire.                                                                                        |
| 08. | BACKPUMP      | A back pack container, for water, with a nozzle and hose used in suppression activities and mop up operations.                                                                                                 |
| 09. | BERM          | Dirt and rocks piled in a mound along the lower side of a trench.                                                                                                                                              |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

10. **BLACKLINING**

Preburning of fuels adjacent to a control line during periods of low fire danger to widen and strengthen the line (strip burning).
11. **BLOWUP**

A sudden increase in fire intensity or rate of spread sufficient to preclude direct control or to upset existing control plans. One or more of the following will usually be involved: prolific crowning and/or spotting, fire whirls, area ignition, or a strong convection column. (NWCG)
12. **BURN**

The area inside the fire perimeter, not including islands, in which the fire has consumed all or much of the available fuel. (black)
13. **BURNING OUT**

Any intentionally set fire used to consume the fuel in an island or between the control line and inactive fire perimeter (firing out).
14. **CANOPY**

Leaves, branches, and limbs extending outward from brush and trees.
15. **CAT FACE**

Any scar or deformity of the trunk of a tree (originally, a scar caused by the blade of a CAT or dozer.)
16. **C.C.V.**

Crew Carrying Vehicle
17. **CHIMNEY EFFECT  
(CHIMNEY)**

Turbulent updrafts caused by windflow restrictions, creating an increase in wind velocity
18. **CHUTE**

Steep “V” drainage
19. **COLD LINE**

Control line or a segment of control line that is out and there is no intention that further action will be taken. All fire control activities have been completed including mopup and patrol.



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- |                              |                                                                                                                                                                                                                                                                                               |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20. COLD TRAILING            | Any procedure used to secure inactive sections of the fire perimeter, including but not limited to: constructing control line (scratch, wet, foam, retardant), trenching, scattering fuel, felling snags, feeling out hot areas with the back of the hand, and mopping up the fire perimeter. |
| 21. CONDUCTION               | Heat transfer through a material from a region of higher temperature to a region of lower temperature.                                                                                                                                                                                        |
| 22. CONSTRUCTED FIRE BARRIER | A pre-existing improvement, such as a highway, dam, or plowed field, which will obstruct the spread of fire (Manmade Barrier).                                                                                                                                                                |
| 23. CONTAINMENT              | Completion of a control line around a fire and any associated spot fires which can reasonably be expected to stop the fires spread.                                                                                                                                                           |
| 24. CONTROL LINE             | An inclusive term for all primary and secondary line, constructed or natural fire barriers and treated edges used to control a fire.                                                                                                                                                          |
| 25. CONVECTION               | The transfer of heat by the movement of a gas or liquid. (IFSTA)                                                                                                                                                                                                                              |
| 26. CONVECTION COLUMN        | The transfer of heat by the movement of a gas, as demonstrated by a rising column of smoke and hot gases above a fire.                                                                                                                                                                        |
| 27. CROWN FIRE               | A fire that advances from top to top of trees or shrubs, more or less independently of the surface fire.                                                                                                                                                                                      |
| 28. DIME                     | A slang term representing the ten (10) foot minimum working or walking distance between fire crew firefighters.                                                                                                                                                                               |
| 29. DIRECT ATTACK            | A method of fire suppression in which suppression activity takes place on or near the fire perimeter.                                                                                                                                                                                         |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- |     |                          |                                                                                                                                                                                                                                                                                                        |
|-----|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 30. | DOZER LINE               | Control line constructed by bulldozer.                                                                                                                                                                                                                                                                 |
| 31. | DRIP TORCH               | A firing device consisting of a canister, a wick, and a fuel mixture, which is used in backfire and burnout operations, also called a backfire torch.                                                                                                                                                  |
| 32. | DUFF                     | Ground fuel consisting of partly decomposed (rotten) organic material, and humus.                                                                                                                                                                                                                      |
| 33. | DUST DEVILS (Whirlwind)  | A spiral of air, a small cyclone                                                                                                                                                                                                                                                                       |
| 34. | ESCAPE ROUTE             | A preplanned and understood route firefighters take to move to a safety zone or other low-risk area. When escape routes deviate from a defined physical path, they should be clearly marked (flagged).                                                                                                 |
| 35. | EXTREME FIRE<br>BEHAVIOR | A sudden increase in fire intensity or rate of spread sufficient to preclude direct control or to upset existing control plans. One or more of the following will usually be involved: prolific crowning and/or spotting, fire whirls, area ignition, or a strong convection column. (NWCG) (Blow-up). |
| 36. | FEELING FOR FIRE         | Feeling for heat, during mopup operations.                                                                                                                                                                                                                                                             |
| 37. | FINGER                   | A portion of a fire perimeter extending outward from the main body of the fire.                                                                                                                                                                                                                        |
| 38. | FINISHED LINE            | Control line or a segment of control line that has been completed to the point that further action to widen and/or improve the line should not be necessary.                                                                                                                                           |
| 39. | FIRE BEHAVIOR            | The manner and speed in which fuel ignites, flames develop, and fires spread.                                                                                                                                                                                                                          |
| 40. | FIRE PERIMETER           | The edge or outer boundary of a fire. Islands may create interior perimeters.                                                                                                                                                                                                                          |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

41. FIRE SHELTER
- A personal protection item carried by firefighters which, when deployed, unfolds to form a pup tent-like shelter of heat reflective materials. Designed to provide last resort protection for a firefighter trapped by fire. (SAF, NWCG)
42. FIRE WHIRL
- A mass of air and flames rotating rapidly (like a tornado) around an advancing vertical axis, as a dust devil or whirlwind (Extreme Fire Behavior)
43. FIRELINE
- (1) An inclusive term used to indicate any area where fire suppression activities, as opposed to incident base or incident command post activities, are occurring. The term is often shortened to "line", as in "line assignment."
- (2) A general term used to describe a line cut, scraped, or dug to mineral soil designed to stop the spread of a fire.
44. FLANK ATTACK
- A fire suppression tactic where action is concentrated on the sides of the fire between the heel and the head.
45. FLANKS
- Those portions of a fire perimeter extending from the heel to the head. The designation of left and right is as viewed from the heel.
46. FLAREUP
- Any sudden acceleration of fire spread or intensification of the fire. Unlike blowup, a flareup is of relatively short duration and does not radically change existing control plans. (NWCG)
47. FLASH FUEL
- Fuels such as grass, leaves, draped pine needles, fern, tree moss, and some kinds of slash which ignite readily and are consumed rapidly when dry (fine or light fuels). (NWCG)



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- |     |               |                                                                                                                                        |
|-----|---------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 48. | FUEL          | Combustible material. (SAF)                                                                                                            |
| 49. | FUEL BREAK    | A strip of land from which the fuel has been removed.                                                                                  |
| 50. | FUEL MOISTURE | Water content of a fuel expressed as a percentage of the oven-dry weight of the fuel. (SAF)                                            |
| 51. | FUSEE         | Road flare type device used to set fire during backfire and burnout operations.                                                        |
| 52. | GREEN         | An area of unburned fuel, generally, consisting of islands and areas outside the fire perimeter.                                       |
| 53. | GROUND FIRE   | Fire that consumes the organic material beneath the surface litter. (duff, roots or organic material in soil). (Wildland Firefighting) |
| 54. | HAND LINE     | A fire control method where control line is constructed by personnel using hand tools and hand operated power tools.                   |
| 55. | HEAD          | The most rapidly spreading portion of the fire perimeter, usually to the leeward or up-slope. (NWCG)                                   |
| 56. | HEAVY FUELS   | Dead fuels over 3 inches in diameter, live fuels over 6 feet in height, and deep duff.                                                 |
| 57. | HEEL          | The slowest spreading portion of fire perimeter, usually upwind or down-slope and is generally opposite the head.                      |
| 58. | HELIBASE      | A location within the general incident area for parking, fueling, maintenance, and loading of helicopters. (ICS)                       |
| 59. | HELIPORT      | A <u>permanent</u> or semi-permanent base of operations for helicopters.                                                               |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- 
- |                                  |                                                                                                                                                                                                                                                                                 |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 60.    HELISPOT                  | A <u>temporary</u> landing location for helicopters, normally constructed on or near fire suppression operations for access of personnel and equipment.                                                                                                                         |
| 61.    HELITACK                  | A fire suppression resource consisting of a helicopter, a crew, and a helitender.                                                                                                                                                                                               |
| 62.    HELITACK CREW             | A group of firefighters specially trained in the tactical and logistical use of helicopters for fire suppression. (SAF)                                                                                                                                                         |
| 63.    HOOKLINE ORDER            | A slang term used to describe the sequencing of personnel and the tool configuration within a fire crew (fire crew order).                                                                                                                                                      |
| 64.    HOSE LAY<br>(PROGRESSIVE) | A fire suppression tactic involving the extinguishment of successive increments of fire and the addition of lengths of hose at the nozzle as the previous length is extended. Laterals are usually installed after every second length to maintain control and assist in mopup. |
| 65.    HOSE LAY (SIMPLE)         | A fire suppression tactic involving the extinguishment of successive increments of fire and the addition of lengths of hose at the nozzle as the previous length is extended. Hose tees and laterals are not installed.                                                         |
| 66.    HOTSPOT                   | A particularly active part of a fire. (SAF)                                                                                                                                                                                                                                     |
| 67.    HOTSPOTTING               | Slowing or checking the spread of a fire at points of more rapid spread or areas of special threat, often resulting in intermittent segments of temporary line.                                                                                                                 |
| 68.    HUMIDITY                  | See RELATIVE HUMIDITY                                                                                                                                                                                                                                                           |
| 69.    I.C.S. (ICS)              | Incident Command System, an organizational system designed for handling emergencies of all types and sizes.                                                                                                                                                                     |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- |                      |                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 70. INCIDENT BASE    | That location at which the primary logistics functions are coordinated and administered. (NWCG)                                                                                                      |
| 71. INDIRECT ATTACK  | A method of fire suppression in which suppression activity takes place some distance from the fire perimeter, and often takes advantage of fire barriers.                                            |
| 72. ISLAND           | An area of unburned fuel inside the fire perimeter.                                                                                                                                                  |
| 73. LADDER FUELS     | Fuels which provide vertical continuity between surface fuels and aerial fuels, thereby allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease. (SAF)       |
| 74. L.C.E.S. (LCES)  | Fire Safety Acronym standing for Lookouts, Communications, Escape Routes, and Safety Zones. This expression has been coined to reinforce the 10 Standard Orders and 18 Situations, not replace them. |
| 75. LEAP FROG METHOD | An attack or mopup method where action is initiated at separate locations. As each unit ties in with the line constructed by the preceding unit, they move ahead to begin work on a new section.     |
| 76. LIGHT FUELS      | Grass, pine needles, small bushes, twigs, and other fine fuels.                                                                                                                                      |
| 77. LITTER           | Surface fuels composed of dead sticks, branches, twigs, and recently fallen leaves or needles that are unaltered in structure by decomposition.                                                      |
| 78. MEDIUM FUELS     | Brush. Bushes, dead fuels under 3 inches in diameter, and live fuels less than 6 feet tall.                                                                                                          |
| 79. MINERAL SOIL     | Bare dirt that is free of combustible materials.                                                                                                                                                     |





# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- 
- |                     |                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 80. MOP-UP          | The act of making a fire, or any segment of a fire, safe by extinguishing or removing burning material along or near the control line, by felling snags, and trenching as required.                                                                                                                                                                                                                        |
| 81. NATURAL BARRIER | An unimproved area devoid of combustible material, such as rivers, streams, rock outcroppings, etc.                                                                                                                                                                                                                                                                                                        |
| 82. NOMEX           | A generic term for wildland fire safety clothing that is made from this fire resistive material.                                                                                                                                                                                                                                                                                                           |
| 83. OVERHANG        | Branches from bushes and limbs from trees that hang into, or over, the control line (Canopy).                                                                                                                                                                                                                                                                                                              |
| 84. PARALLEL        | An indirect method of fire suppression in which control line is constructed parallel to, and just far enough from, the fire perimeter to enable firefighters and equipment to work effectively. The intervening strip of unburned fuel is normally burned out as the control line proceeds, but may be allowed to burn out unassisted where this occurs without undue delay or threat to the control line. |
| 85. PATROL          | The final fire suppression phase where resources are assigned to watch for fires in the unburned area or flare ups or hot spots in the burn which may escape the control line.                                                                                                                                                                                                                             |
| 86. POCKETS         | Unburned fuel between the fingers of a fire.                                                                                                                                                                                                                                                                                                                                                               |
| 87. POINT OF ORIGIN | The location where a fire started.                                                                                                                                                                                                                                                                                                                                                                         |
| 88. RADIATION       | Transfer of heat in all directions in straight lines through the air.                                                                                                                                                                                                                                                                                                                                      |
| 89. REBURN          | The burning of an area through which fire has previously passed and has left flammable fuel that ignites when burning conditions are more favorable.                                                                                                                                                                                                                                                       |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- |      |                   |                                                                                                                                                                        |
|------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 90.  | RELATIVE HUMIDITY | The ratio, expressed as a percentage, of the amount of water vapor in the air compared to the amount the air is capable of holding under the same conditions. (SAF)    |
| 91.  | RETARDANT         | A chemical solution that slows or stops the spread of fire and is usually applied by aircraft.                                                                         |
| 92.  | SADDLE            | A dip or low point in a hill or mountain ridge.                                                                                                                        |
| 93.  | SAFETY ZONE       | An area devoid of flammable material, can be natural or man made, used for escape in the event that fire threatens to overrun fire suppression personnel.              |
| 94.  | SCRAPE            | A slang term indicating that portion of the handline that is dug to mineral soil.                                                                                      |
| 95.  | SCRATCH LINE      | A quickly constructed, minimum width, temporary line where fuel has been removed to mineral soil. May be constructed manually or mechanically.                         |
| 96.  | SECONDARY LINE    | Backup control line that is anticipated to become the ultimate perimeter of the fire should the primary control line fail to stop and hold the fire.                   |
| 97.  | SLASH             | Heavy concentrations of downed fuel resulting from such natural events as wind, fire, or snow breakage or such human activities as logging or road construction. (SAF) |
| 98.  | SLEEPER FIRE      | A fire that remains inactive for a considerable time.                                                                                                                  |
| 99.  | SLOPE             | The up or down slant of a hill.                                                                                                                                        |
| 100. | SLOPOVER          | A fire that burns across a control line.                                                                                                                               |
| 101. | SMOTHER           | To cut off the air supply to a fire.                                                                                                                                   |
| 102. | SNAG              | A standing dead tree.                                                                                                                                                  |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

- |                          |                                                                                                                                                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 103. SPOT FIRE           | A fire, outside the perimeter of the main fire, that was started by sparks or hot embers from the original fire.                                                                                                   |
| 104. SPOTTING            | A condition when one or more spot fires occur. (Severe spotting, or multiple spot fires, will often indicate or serve as a warning of extreme fire behavior.)                                                      |
| 105. STOB (STUB) (STAUB) | A stump left when a bush is cut; a brush stump                                                                                                                                                                     |
| 106. STUMP               | The base of a tree that is left in the ground after the tree is felled.                                                                                                                                            |
| 107. SURFACE FIRE        | Fire that burns loose debris on the surface, which includes dead branches, leaves and low vegetation.                                                                                                              |
| 108. TIE-IN              | The act of securing the end of a section of control line to a fire barrier or another segment of line. The term is also used to describe the location where that action took place.                                |
| 109. TOPOGRAPHY          | The characteristics of the ground; the lay of the land. Includes such features as slope, elevation, and aspect.                                                                                                    |
| 110. TRENCH              | A ditch and berm constructed to catch rolling material.                                                                                                                                                            |
| 111. UNDERCUT LINE       | A control line constructed on a slope below a fire. Not to be confused with trench.                                                                                                                                |
| 112. VORTEX TURBULENCE   | High velocity wind that comes down off the winds of an airplane, or from the rotors of a helicopter, that can cause turbulence and wind up to 25 miles per hour and have an erratic effect on the fire's behavior. |
| 113. WIDOW MAKER         | Any weakened portion of a tree which may fall unexpectedly and injure personnel.                                                                                                                                   |



# FIRE CREW FIREFIGHTER TRAINING

Procedures Handbook 4200

WILDLAND FIREFIGHTING  
TERMINOLOGY

---

## 114. WINDROW

A ridge or row of litter created during construction of a control line.